Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended)   A method for determining code transmit power [[in]] for a time division duplex communication system, comprising:

a)   obtaining a number of codes in a downlink and a maximum allowed dynamic range;

b)   determining an upper bound and a lower bound of a signal to interference ratio (SIR) of each code based on a block error rate (BLER) requirement;

c)   computing a load contributed by each code;

d)   summing the load to obtain a current total load;

e)   determining a limit for a sum of upper bound code transmit power based on a current load;

f)   determining a code with the highest upper bound SIR;

g)   employing the upper bound code transmit power of the code having the highest upper bound SIR;

h)   determining a desired relative ratio between the upper bound code transmit power of each code and a reference;

i)   determining the upper bound transmit power of each code based on a sum of the upper bound code transmit power; and

j)   setting a lower bound transmit power for each code based on a minimum allowed carrier power of a Node B carrier power in the system.

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2. (Original) The method of claim 1, further comprising:

adjusting code transmit powers to lie within a dynamic range.

3. (Original) The method of claim 1, wherein step (a) further comprises:

obtaining a multi-user detector (MUD) efficiency factor and average inter-intracell interference ratio and a maximum allowed load in downlink.

4. (Original) The method of claim 1, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a worst case as the upper bound.

5. (Original) The method of claim 1, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a best case.

6. (Currently amended) A method for determining code transmit power [[in]] for a frequency division duplex communication system, comprising:

a) obtaining a number of codes in a downlink and a maximum allowed load in the downlink;

b) determining an upper bound and a lower bound of a signal to interference ratio (SIR) of each code based on a block error rate (BLER) requirement;

c) computing a load contributed by each code;

d) summing the load to obtain a current total load;

e) determining a limit for a sum of upper bound code transmit power based on a current load;

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   f) determining a code with a highest upper bound SIR;

   g) employing the upper bound code transmit power of the code having the highest upper bound SIR;

   h) determining a desired relative ratio between the upper bound code transmit power of each code and a reference;

   i) determining the upper bound transmit power of each code based on a sum of the upper bound code transmit power; and

   j) setting a lower bound transmit power for each code based on a minimum <u>allowed carrier power of a</u> Node B ~~carrier power~~ <u>in the system</u>.

7. (Original) The method of claim 6, further comprising:

   adjusting code transmit powers to lie within a dynamic range.

8. (Original) The method of claim 6, wherein step (a) further comprises:

   obtaining a maximum allowed dynamic range, an orthogonal factor, and an average inter-intracell interference ratio.

9. (Original) The method of claim 6, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a worst case as the upper bound.

10. (Original) The method of claim 6, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a best case.

11. (Currently amended) A method for determining code transmit power, comprising:

    a)   obtaining a number of codes in a downlink in a maximum allowed dynamic range;

    b)   determining a lower bound and an upper bound signal-to-interference ratio (SIR) of each code based on a block error rate (BLER) criteria;

    c)   determining a code with a highest upper bound SIR and establishing its upper bound transmit code power as a reference;

    d)   determining a desired relative ratio between each code upper bound transmit power and the reference;

    e)   determining an upper bound transmit power of each code based on a constraint of a maximum Node B carrier power; and

    f)   setting a lower bound transmit power for each code at a minimum <u>allowed carrier power of a</u> Node B ~~carrier power~~.

    12.   (Original)   The method of claim 11, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a worst case as the upper bound.

    13.   (Original)   The method of claim 11, wherein step (b) further includes selecting an SIR target corresponding to an SIR in a best case.

Claims 14-20.   (Cancelled)

    21.   (New)   The method of claim 1, further comprising the step of:
        adjusting maximum carrier power of the Node B by a given margin to prevent total code transmit power to reach the maximum allowed value.